To: Ostrander, David[Ostrander.David@epa.gov]

From: Jack Nickerson

Sent: Wed 8/19/2015 2:28:48 PM

Subject: RE: Silverton spill

Dave, Sorry to hear you're getting run ragged. In the small world department I lived in Southfork for 3 years while I was Tunnel Engineer for CDOT on the Wolf creek pass tunnel project. Anyway there was several transformer banks in the Sunnyside while it was working. I have no knowledge of any work done during post shutdown. Given the work climate back then leaving the transformers in certainly wouldn't surprise me.

Give a shout to Crash for me. I'll be Durango from Sunday the 23rd through the 26th for work stuff if you're around we can get together.

Jack

From: Ostrander, David [mailto:Ostrander.David@epa.gov]

Sent: Tuesday, August 18, 2015 9:42 PM

To: Jack Nickerson < JNickerson@yeh-eng.com >

Subject: Re: Silverton spill

Hey Jack, good to hear from you. It has been a whirlwind so far. working from 6 to as late as midnight, mostly managing the political chaos. I got a mine tour today and some great discussions with Bruce Stover and Alan .. with DRMS. Clearly the original cause of this problem was a short sighted plugging of the American Tunnel. We have some really interesting unknowns about why there were no signs of an large head or build up behind this collapsed adit and how the flows are now 5 times what they were before the blowout. Lots of theories running around but more information will await the portal rehab and tunnel stabilization which we are planning to proceed ahead with. We have a nice clean adit now (bad joke).

I wish I had some more time but have been going flat out every minute I am here. I also heard from John Craig aka Crash who is still in Dugway but retiring very soon. My daughter lives over in South Fork so I get down to these parts a little more often these days.

Hope all is well with you and we can talk soon.

ps Do you have any knowledge of old transformers left behind in any of these mine closings. The PCB issue is being raised but we have no positive information and I don't like chasing ghosts.

Sent from my iPad

On Aug 18, 2015, at 11:14 AM, Jack Nickerson < <u>JNickerson@yeh-eng.com</u>> wrote:

Hey Dave, Good to see you are in the area. I know you don't need this but this spill thing is taking on a life of its own. I just want you to know I spent over 6 years working underground at the Sunnyside mine ending up as a senior mine engineer for Sunnyside Gold Corp. The mine has gone through several iterations of owners. I have also worked in the other mines in the area dating all the way back to the early 80's. I know you don't need this unsolicited advice but I know a lot of the players in the local area and did a bunch of work with Bill Simon years ago before he started the Animas River Stakeholders group. I am also longtime friends with Scott Fetchenhier, and Ernie Kuhlman, County commissioners and Pete Maisel and Tiffany deKay of the Town Board.

All that said you guys are in a bit of a pickle down there politically and with the problem at hand. I just want to give my opinion as a former engineer at the Sunnyside mine that the root problem is the bulkhead in the American tunnel. I believe any long term solution involves draining the Sunnyside and basically starting all over. I am convinced the Gold King is being impacted by the backup of water in the Sunnyside. We mined up in the Lake Emma basin in the late 80's and I know the Sunnyside can be accessed from that point to determine what elevation of the water backed up in the mine is. I think this crucial to understanding how inter- connected all these old workings are. I will admit I know nothing of the bulkhead design in the American tunnel and if there is any monitoring of the static water pressure at that point. I really don't think much in the way instrumentation was installed in the bulkhead.

That said I believe it is crucial to bring the Sunnyside into the solution discussion, just trying plug these old working simply won't solve the problem. The water quality since that bulkhead was installed and the water treatment plant removed has shown a steady decline since the early 2000's which I believe is absolutely related to increased retention time and exposure of these mine waters to the orebodies that remain in these old workings. This has been significantly documented.

All that said and having wasted your time I would love to chat with you when you can find the time. I manage a lot of CDOT projects in that neck of woods including a crib wall project currently under construction on Red Mountain pass.

Thanks for your time, Jack

From: Ostrander, David [mailto:Ostrander.David@epa.gov]

Sent: Tuesday, August 11, 2015 3:00 PM

To: Jack Nickerson < <u>JNickerson@yeh-eng.com</u>>

Subject: Re: Silverton spill

It is one and the same. Will catch up when rthings aren't so crazy

Sent from my iPhone

On Aug 11, 2015, at 12:56 PM, Jack Nickerson < <u>JNickerson@yeh-eng.com</u>> wrote:

Dave, Is this the Dave Ostrander from ATO at Colorado school of Mines? If so this is your frat brother Jack Nickerson and wanted to let I have a ton of experience in the Silverton area and was actually in the Gold King mine in the early 80's if there is anything I can do to help let me know. If this is the Dave I know call me and we can catch up.

Thanks, Jack

Jack Nickerson, P.E.

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